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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,382	10/26/2001	Srinivas Gutta	US010532	4632
24737	7590	06/16/2004		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER LAI, ANNE VIET NGA	
			ART UNIT	PAPER NUMBER
			2636	
			DATE MAILED: 06/16/2004	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/043,382

Applicant(s)

GUTTA ET AL.

Examiner

Anne V. Lai

Art Unit

2636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-9,11 and 13-21 is/are rejected.
- 7) ☒ Claim(s) 3,5,10,12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4, 6-9, 11, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kazama** [US.6,111,580] in view of **Curry** [US. 3,922,665].

Regarding claim 1, **Kazama** discloses (Figs. 17-18; col. 12, line 8 through col. 13, line 20) a method to control alarm clock signals by tracking the behavior of a person in a predetermined area under surveillance after the activation of the alarm clock; the tracking is based on a series of frame data (video camera).

Kazama does not disclose gradually increase the alarm clock signals. **Curry** teaches a method for adjusting an audio stimulus signal based on the behavior of a sleepy person by determining whether the person is motionless within a first predetermined time period, and if motionless, gradually increasing the audio stimulus signal (abstract, lines 7-8).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to apply **Curry** teaching to **Kazama** clock alarm to better stimulate the sleeper to effectively wake him up by gradually increase intensity of the alarm clock signals.

Regarding claim 2, **Curry** determines whether the person is motionless within a second predetermined time period; and if motionless, further increasing the wake-up signal (more severe stimulus is generated if no response is received within a predetermined time, abstract line 10-14, and col.2 lines 20-22).

Regarding claim 9, the combined **Kazama** and **Curry** method provides adjusting the wake-up signals of an alarm clock to assist in awaking a person, the method comprising steps of:

(a) setting a wake-up time in the alarm clock to activate the wake-up signals when the set time matches a current time (Kazama; col. 12, line 26);

(b) determining whether the person is motionless for a first predetermined time period (Curry's abstract and claim 1) after the activation of the alarm clock (Kazama, cols. 12-13) by tracking behavior in a predetermined area under surveillance based on a series of frame data (Kazama TV cameras);

(c) if motionless, gradually increasing the wake-up signals of the alarm for a second predetermined time period (Curry's claim 3);

(d) monitoring behavior of the person for a third predetermined time period; and

(e) if motionless, further increasing the wake-up signals of the alarm clock for a fourth predetermined time period (Curry's claim 4) .

Regarding claims 4 and 11, **Kazama** and **Curry** alarm clock comprises the steps of gradually increasing the electrical power supplied to a plurality of electronic devices (the tactile, auditory and visual alarm devices, Curry's abstract and col.2, line 39)

coupled to the alarm clock according to predetermined criteria if the person is motionless.

Regarding claims 6 and 13, the combined **Kazama** and **Curry** method comprises step of deactivating (shut-off) the alarm clock if the person is not motionless.

Regarding claims 7 and 8, **Kazama** discloses the behavior of the person is tracked with cameras or sensors.

Regarding claim 14, **Kazama** and **Curry** wake-up signals include combination of tactile, auditory and light (Curry, col.2, line 39).

Regarding claim 15, **Kazama** and **Curry** disclose an alarm clock system for adjusting wake-up signals comprising:

- a detecting means (Kazama' TV camera, figs. 17-18; col. 12-13) for observing the behavior of a person in a predetermined area under surveillance.

- an analyzing means for analyzing an output series of frame data from the detection means to determine whether the person is motionless for a predetermined time period;

- a speaker (audio alarm) coupled to the analyzing means for producing the wake-up signals; and

- a control means for generating a control signal to gradually increase the wake-up signals based on whether the person is motionless (Curry).

Regarding claim 16, **Kazama** and **Curry** alarm clock system further comprises an adjusting means for adjusting the electrical power supplied to a plurality of devices

(tactile, auditory and visual alarm devices in Curry's system) coupled to the control means.

Regarding claim 17, **Kazama** and **Curry** alarm clock system includes means for setting an alarm time.

Regarding claim 18, **Kazama** and **Curry** alarm clock system comprises a battery power source (Curry, col.3, line 1).

Regarding claims 19-20, **Kazama** 's alarm clock observing means includes cameras or sensors.

Regarding claim 21, **Kazama** and **Curry** alarm clock wake-up signals includes combination of sound and light (Curry).

Response to Arguments

3. In response to applicant's arguments with respect to claims 1, 9 and 15 regarding a) tracking behavior of a person, b) in a predetermined area and c) determining whether a person is motionless.

a) Applicant's argues that Kazama's device only tracks the behavior of hand and eye rather than the behavior of a person. The American Heritage Dictionary, Fourth Edition, 2000, defines "Behavior": the actions or reactions of a person or animal in response to external or internal stimuli. In the examiner stand point, tracking the behavior of a person can be based on any movement of his body; for a person being waked up by an alarm clock signal, typical behavior depicted by Kazama are hand movement and eye opening. It would be obvious to see Kazama focuses his gesture

recognition on these two gesture elements because a person at sleep may not always motionless, he can have all kind of motions; assuming any movement detected to be a sign of waking up may lead to erroneous analysis. However, tracking some gestures representing the behavior of a person responsive to a particular event or tracking all gestures of the person in response to that particular event is totally based on designer choice to provide the result in the best interest of the system user.

b) Applicant's argues that Kazama has no predetermined area under surveillance. Kazama does disclose his predetermined area in the neighboring the alarm clock and a TV camera is taken inputs images of the person from there. It would be obvious the alarm clock must be placed in the same room where the person sleep and more likely near his bed, therefore the camera needs to take input images near the alarm clock. However it would be obvious to one having ordinary skill in the art, the camera can be positioned at any convenient place to input images of the person, such position is a matter of user choice for the best operation of the system.

c) In the applicant's specification, page 8, lines 5-10, the detector determines whether the person is still sleeping if the movement of the person is not detected. Kazama determines the person is still sleeping if the movement of hand and eyes are not detected. Kazama ignores movement of other part of the body because he has chosen the two gestures represent best behavior of a person wake up from sleep. The notion of motionless here is relative since the sleeping person is still breathing, some part of his body is still in motion (unlike motionless dead person), or he sometime has

unconscious movement during sleep. The main intention is to determine whether the person is still sleeping, not motionless from unconscious or dead.

4. Examiner suggests adding to claims 1 and 9, both at part b) after "based on a series of frame data" the words --from a detection means-- because the series of frame data in general can be any kind of frame data from anywhere (television, computer display, video game, etc.).

Conclusion

5. Claims 3, 5, 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

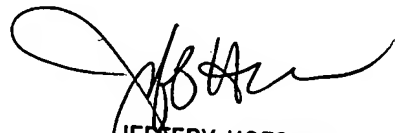
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne V. Lai whose telephone number is 703-305-7925. The examiner can normally be reached on 8:30 am to 6:00 pm, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass Jeffery can be reached on 703-305-4717. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A. V. Lai
June 3, 2004



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